

# Natural Gas Market Prices Monthly Update

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July 1, 2003

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## **NATURAL GAS MARKET PRICE SPIKE UPDATE**

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### **Summary**

On March 13, 2003, Governor Davis asked the California Energy Commission (Energy Commission) and the California Public Utilities Commission (CPUC) to review the unexpectedly rapid rise in natural gas market prices that occurred in late February 2003. He also asked that the two Commissions issue a report to his office and provide a monthly update of any additional findings. This report provides an update for July 2003.

Since the first report was issued on March 28, 2003, the Energy Commission and CPUC have examined additional information on market conditions during February and March 2003, the California utilities' activities during this period, and have discussed these findings with the Federal Energy Regulatory Commission (FERC) staff. This monthly update provides more detail on PG&E's actions during this February/March price spike to protect its ratepayers and updates our information on the natural gas storage inventory levels. In summary, the Energy Commission and CPUC staff found that:

1. PG&E was able to reduce its purchases of natural gas on the spot market to less than 2 percent of its total needs during early March,
2. California and U.S. storage levels are improving dramatically.

The following sections provide more detail on these highlights.

### **PG&E Purchasing Pattern**

As reported earlier, the natural gas utilities adjusted their natural gas purchasing behavior during the price spike episode to mitigate the impact of the high spot market prices on core customers. This behavior change was reflected in the weighted average cost of gas (WACOG) as reported in the March 28, 2003 *Natural Gas Market Price Spike Report* and subsequent updates.

We now have more detailed information from PG&E on their purchasing behavior and how it changed during this period. Figure 1 below shows core demand and the basic categories of natural gas supply for PG&E, averaged over two week periods during February and March. Comparing each two week period demonstrates how PG&E's purchases of gas from each category have changed over time. The chart shows that PG&E reduced its purchases of natural gas on the spot market ("Swing Supplies") from 11 percent in early February to two percent in early March. By late March, PG&E was able to sell excess natural gas back into the spot market, thus accounting for the negative Swing Supplies number. The chart also indicates PG&E's ability to increase its purchases of natural gas using longer term contracts ("Committed Supplies"). Finally, PG&E was able to draw heavily upon stored natural gas in February, which allowed it time to establish larger purchases of Committed Supplies. The utility then reduced its use of stored supplies in March and maximized its Committed Supplies.

These actions resulted in PG&E's WACOG costs at Citygate moving from an average of \$5.30/mmcf in early February, to \$6.34 in late February, \$7.47 in early March, and finally down to \$4.99 in late March. By late March, the price was well below the Henry Hub spot market

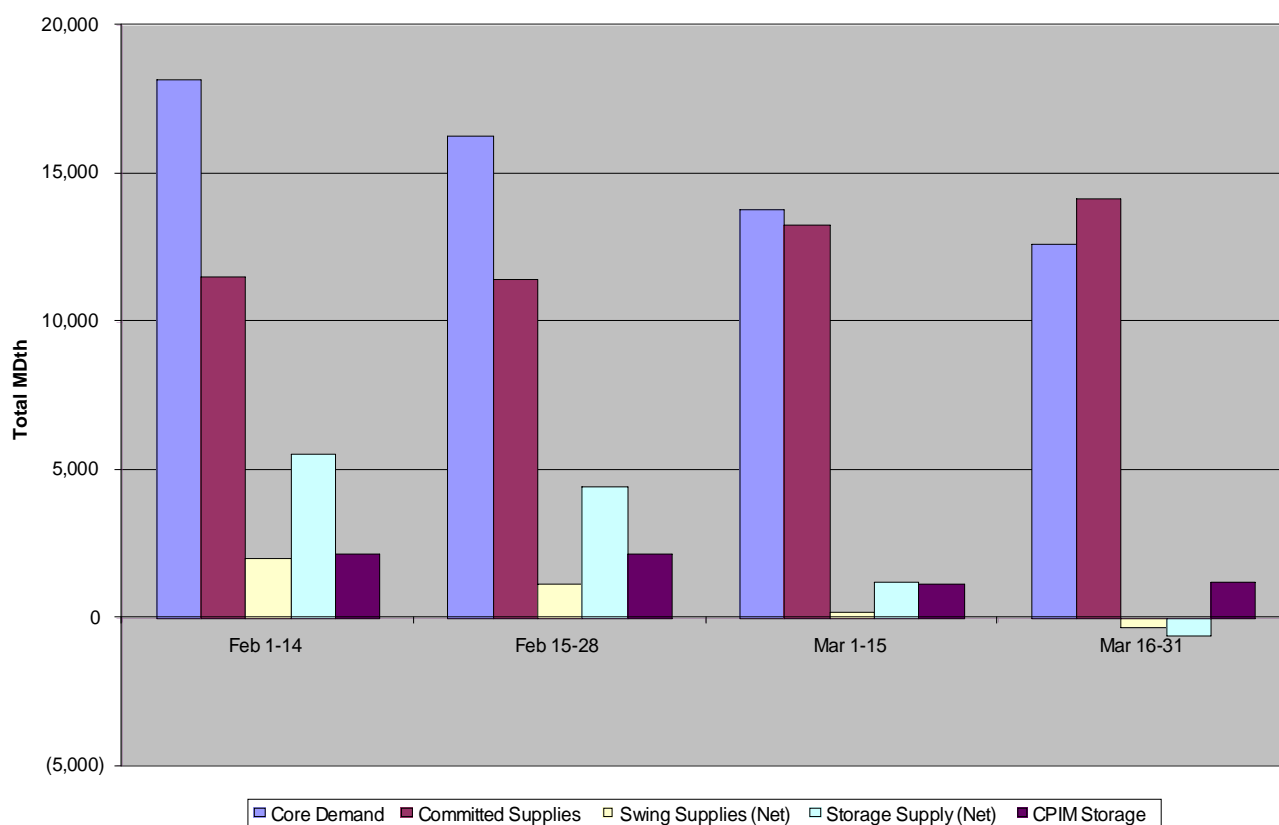
price during the same time period. This change in purchasing behavior saved ratepayers considerable money.

In addition, in our communications with SoCalGas, they indicated that they had surplus stored gas during this same time period and were able to sell part of their inventory into the spot market at prices above what core customers paid, thus reducing the net cost of gas to their customers.

Clearly, natural gas storage facilities and inventories inside California played an important role in moderating the impact of the spot market price spike on core customers.

**Figure 1**

**Core Gas Portfolio: Feb-March 2003**



For the above chart, “Committed Supplies” refers to gas purchased under multi-month term contracts, monthly baseload contracts, and rest-of-month contracts. “Swing Supplies” refers to daily spot market transactions and includes the total spot purchases net of spot sales. “Storage Supply” refers to net amount of gas withdrawn from storage (the positive values) or injected into storage (the negative values) during the time period. “CPIM Storage” refers to the storage use considered typical under PG&E’s Core Procurement Incentive Mechanism.

## Natural Gas Storage Inventory Levels

Natural gas storage is a critical issue, as indicated above, which we have been reporting on for several months. Fortunately, California is in a better position than the rest of the U.S. and will likely achieve its target storage levels by November 1, 2003. As of June 25, California storage inventories were 171 Bcf, above the Energy Commission's estimated 153 Bcf minimum needed to serve core customers, and well on their way to maximum storage levels of 243 Bcf. Figure 2 below indicates the advances in California storage while Figure 3 provides similar information for the U.S. It is important to note that significant quantities of natural gas have been injected into U.S. storage facilities. For example, during the week of June 9, 2003, a record high 125 Bcf was injected into storage. During the week of June 20, 2003, 127 Bcf was injected into U.S. storage facilities. This compares with 81 Bcf injected at the same time last year and 85 Bcf injected on average during this week in the past five years.

U.S. storage inventories are still well below needed levels, but the rate of injection is occurring so rapidly that one analyst predicted on June 30, 2003 that U.S. storage could reach 3.2 Tcf if injection levels continue at this very robust pace. In the weeks remaining until the November 1, 2003 deadline, injections rates only need to average 59 Bcf/week to reach the 2.7 Tcf level and 75 Bcf/week to reach 3.0 Tcf. Many national trade analysts are now predicting that U.S. storage levels will reach 2.5-3.0 Tcf by the start of this winter, well above earlier predictions. A storage level of 3.0 Tcf is the minimum most analysts consider is needed to provide a comfortable buffer for winter peak demand.

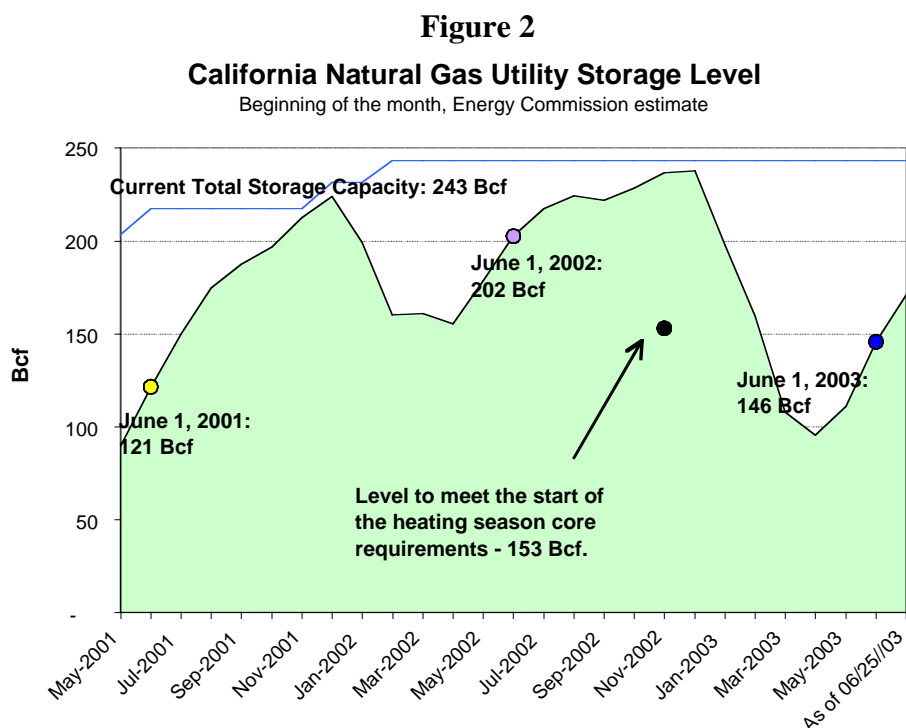
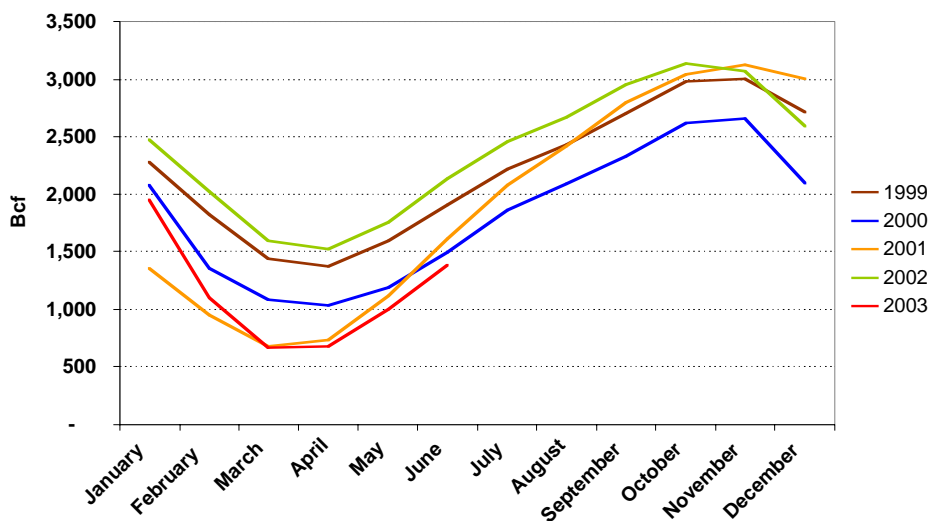


Figure 3

## U.S. Natural Gas Storage Levels (Monthly Averages)

Source: EIA/AGA



Current U.S. Natural Gas Storage Capacity: 3,262 Billion Cubic Feet

Next month, we will be reporting on the addition of the new Kern River Expansion pipeline project, which became operational on May 1, and its value to California. With this project and the high levels of natural gas storage expected by this fall, California is well positioned to supply its needs for the winter of 2003-2004. California's collective actions to ensure its efficient use of natural gas, improve its natural gas infrastructure, and maximize storage inventories will ensure that California does not contribute to any future market price spikes. However, natural gas prices in California are tied to national market prices, and California consumers will be impacted, to some extent, by the effects of any future national price spikes in spite of our efficient use of natural gas and robust infrastructure.

In summary, the maximum use of stored natural gas and the increasing role of longer term contracts played an important role in helping to mitigate the impacts of spot market price spikes on California consumers. Our Commissions will be investigating these issues in more detail later this year.